

Appeal from a decision of the Wyoming State Office, Bureau of Land Management, rejecting noncompetitive oil and gas lease offer W-99051.

Affirmed.

1. Oil and Gas Leases: Known Geologic Structure--Oil and Gas Leases:  
Offers to Lease

BLM properly rejects a noncompetitive oil and gas lease offer for land determined to be within the known geologic structure of a producing oil or gas field where BLM justifiably concludes that there is a reasonable probability that the land is underlain by a producing structure based on its interpretation of all relevant information that the land is underlain by channel sands which at certain points have been productive of oil and gas, and where the offeror merely presents a contrary opinion.

APPEARANCES: Roger Schock, pro se; Lowell L. Madsen, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Denver, Colorado, for the Bureau of Land Management. 1/

OPINION BY ADMINISTRATIVE JUDGE HARRIS

Roger Schock has appealed from a decision of the Wyoming State Office, Bureau of Land Management (BLM), dated July 29, 1986, rejecting his noncompetitive oil and gas lease offer, W-99051.

1/ On Aug. 1, 1988, David P. Stang, Esq., filed a document on behalf of Schock styled "Motion to Stay Proceedings," requesting that the present appeal be stayed "until the subject Known Geological Structure and every other Known Geological Structure on appeal by other appellants is remanded to the National Academy of Sciences, the Office of Technology Assessment or any other third-party comprised of qualified, petroleum geologists for an extensive review and commentary." The basis for the stay request was certain letters to Secretary of the Interior Hodel, dated June 30 and 29, 1988, respectively, from Stang and John M. Parker, Consulting Geologist, recommending such a third-party geological review. There is no evidence of any favorable action by the Secretary on that recommendation. Under the circumstances, we find no reason to further delay resolution of this appeal.

Schock's simultaneous oil and gas lease application was drawn with priority for parcel WY-250 in a simultaneous oil and gas lease drawing. The parcel, which encompasses 160 acres of land situated in the SW 1/4 NE 1/4, SE 1/4 NW 1/4, N 1/2 SE 1/4 sec. 26, T. 39 N., R. 76 W., sixth principal meridian, Converse County, Wyoming, was listed as available for oil and gas leasing in a December 1985 BLM notice. By decision dated March 4, 1986, BLM required Schock to execute copies of a noncompetitive oil and gas lease offer (W-99051) for parcel WY-250, along with an attached stipulation, and to return the documents to BLM within 30 days of receipt of the decision. On March 12, 1986, Schock filed executed copies of the lease offer and attached stipulation with BLM.

By memorandum dated July 15, 1986, the District Manager, Casper District Office, notified the State Director that the lands in lease offer W-99051 were "entirely within the Taylor KGS [known geologic structure] effective June 25, 1986." In its July 1986 decision, BLM rejected Schock's lease offer pursuant to 43 CFR 3112.5-2(b), because the lands are within the Taylor KGS and, thus, can be leased only by competitive bidding. Schock has appealed from that BLM decision.

Designation of the subject land as part of the Taylor KGS was made on the basis of a BLM report, dated June 25, 1986. <sup>2/</sup> The report states that producing sands were deposited in a "north-south trending fluvial channel system" (Report at l). In determining the extent of the KGS addition, the report essentially relied on a projection of the "A" and "B" sand horizons of the Dakota formation, which projection was based on "successful well completions, geophysical log analysis and geologic interpretation." *Id.* The report notes that these horizons are productive at numerous locations along the projected formation and that, therefore, "any portion of it could be productive under the proper conditions of structure and stratigraphy." *Id.*

In his statement of reasons for appeal (SOR), appellant does not dispute BLM's authority to reject his noncompetitive oil and gas lease offer where the land encompassed by his offer had been determined to be within the Taylor KGS prior to lease issuance, but contends that BLM improperly designated that land as within the Taylor KGS. Appellant principally argues that the area surrounding the land which he seeks to lease is characterized by "disconnected" areas of productive sands in the Dakota formation, which do not encompass the subject land (SOR at 2). Appellant has plotted the extent of these productive areas on Exhibit A, attached to his SOR. Appellant notes that the fact that the productive sands in the Dakota formation are limited in areal extent and reservoir capacity in the immediate vicinity of the subject land is established by the initial potential flows from wells along a geological profile which crosses that land, offsetting dry holes for each of these wells, and the difference in flowing tubing pressures of various wells in that area. Appellant concludes, therefore, that

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<sup>2/</sup> The report was signed by a BLM geologist on July 8, 1986.

BLM has no reasonable basis to infer that the subject land would be productive of oil or gas. <sup>3/</sup>

In response to appellant's SOR, BLM does not dispute appellant's assertion that the producing sands in the Dakota formation generally are "not a continuous sheet sand but rather a series of discontinuous sand bodies" (Exh. 1, attached to BLM's Answer, at 1). However, BLM contends that geophysical data from two wells (the Moncrief Ogalalla Hills No. 1 and the Louisiana Land and Exploration Company (LL&E) W.C. Fee No. 42-35), situated 3 miles apart and containing channel sands in the same stratigraphic horizon, permit a reasonable interpretation that a "channel trend connects the two wells." *Id.* This trend crosses the subject land.

[1] One challenging a KGS determination has the burden of establishing by a preponderance of the evidence that BLM's inclusion of the land in the KGS was erroneous. *Bender v. Clark*, 744 F.2d 1424 (10th Cir. 1984). In satisfying that burden, an appellant must be cognizant of what is meant by the term KGS, which is defined by the Department as the "trap in which an accumulation of oil or gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive." 43 CFR 3100.0-5(1) (emphasis added). While there must be a determination that a structural or stratigraphic trap exists which contains oil or gas, usually by completion of a producing well, the limits of a KGS are not simply the immediate area around that well, but all land where geologic or other evidence indicates that there is a reasonable probability that the land is underlain by the trap or a series of related traps in the same formation(s). Such land is considered presumptively productive because of its inclusion in a KGS. *Thunderbird Oil Corp.*, 91 IBLA 195 (1986), *aff'd sub nom.*, *Planet Corp. v. Hodel*, No. 86-679 HB (D.N.M. May 6, 1987); *B. K. Killion*, 90 IBLA 378 (1986); *Angelina Holly Corp.*, 70 IBLA 294 (1983), *aff'd*, *Angelina Holly Corp. v. Clark*, 587 F. Supp. 1152 (D.D.C. 1984).

The principal focus of BLM's and appellant's analysis is a geological profile drawn from logs of various wells in the vicinity of the subject land. That profile begins at the Moncrief Ogalalla Hills No. 1 well situated in sec. 14, T. 39 N., R. 76 W., sixth principal meridian, Wyoming, then crosses the subject land and continues to the LL&E W.C. Fee No. 42-35 well situated in sec. 35, T. 39 N., R. 76 W., sixth principal meridian, Wyoming, and ends at the Diamond Shamrock Snake Charmer Draw Unit No. 1 well situated in sec. 24, T. 38 N., R. 76 W., sixth principal meridian,

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<sup>3/</sup> Appellant also suggests that BLM's KGS determination may have been influenced by a "third party," regardless of any geologic or other data (SOR at 5). There is no evidence in the record to support this charge, and appellant has offered none. Rather, the evidence indicates that BLM included the subject land in the Taylor KGS based on a careful review of geologic and other data.

Wyoming. 4/ Both BLM and appellant agree that these wells indicate that a similar depositional sequence runs through these wells and crosses the subject land. BLM, however, concludes that a comparison of the logs from the Moncrief well in sec. 14 with logs from Diamond Shamrock's well in sec. 24 "indicate a very similar depositional sequence in both wells. This similarity along with the intervening Dakota well in section 35 is the basis for the interpretation that all three wells penetrated a Dakota channel complex and probably the same channel complex."

Appellant argues, however, that this sequence is characterized by "small, enclosed sand lenses that rarely interconnect," and is not indicative of a "major channel trend" (SOR at 4). As noted supra, appellant bases this argument on the presence of offsetting dry holes, the initial potential flows of producing wells, and the difference in flowing tubing pressures along or near the geological profile. 5/ However, appellant has not demonstrated how the deviation in flowing tubing pressures or the amount of initial potential flows of producing wells translates into a limited areal extent of the reservoirs of the channel sands in the "A" and "B" horizons of the Dakota formation. Accordingly, we discount this evidence.

In addition, the dry holes to which appellant refers are situated northwest or south and southeast of the portion of the geological profile

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4/ Appellant's profile differs from BLM's in two respects. First, appellant extends the profile at either end to two other wells. See Exh. A, attached to appellant's SOR. These wells deviate from the north-south trend of the producing horizons in the Dakota formation in the immediate vicinity of the subject land, as postulated by BLM. Appellant has offered no evidence to justify the extension of the profile to these two wells. Moreover, BLM notes that the logs associated with these wells are "old type logs" which cannot be compared with the other logs and that, in any case, the logs may simply reflect a "separate channel system" (Exh. I, attached to BLM's Answer, at 1). Second, appellant includes three other wells in the profile, the Moncrief Skyline Ranch No. 15-1, LL&E Barton Ranch State No. 23-36, and LL&E GGN Fee No. 32-13 wells. These wells are situated, respectively, in sec. 15, T. 39 N., R. 76 W.; sec. 36, T. 39 N., R. 76 W.; and sec. 13, T. 38 N., R. 76 W., sixth principal meridian, Wyoming. These are three of the offsetting dry holes which appellant argues support his thesis that the Dakota formation is not continuously productive in the area of the subject land. However, as noted infra, the existence of these dry holes does not overcome a reasonable inference that the subject land would be underlain by a channel system.

5/ Appellant notes that the Ogalalla Hills No. 1 well had initial production of 13 barrels of oil per day (BOPD) and 220 thousand cubic feet of gas (MCFG) and that the LL&E W.C. Fee No. 42-35 well had initial production of 166 BOPD and 365 MCFG from the Dakota formation (Exh. G attached to appellant's SOR). In the case of the other wells along appellant's geological profile, including the Snake Charmer Draw Unit No. 1 well, appellant notes that the Dakota formation was "tight." Id. These wells are considered by appellant to be the offsetting dry holes.

which crosses the subject land. The land in question is bracketed by two wells (the Ogalalla Hills No. 1 and LL&E W.C. Fee No. 42-35), both of which were productive from the Dakota formation. BLM was correct in concluding that there is a reasonable probability that the land is underlain by the same depositional sequence. See Thunderbird Oil Corp., *supra*. As a general matter, appellant's evidence of dry holes merely supports BLM's conclusion that productive sands within the channel system are not a continuous sheet. However, it fails to establish that the land in question is not presumptively productive of oil or gas where there is a reasonable probability that the channel system underlies the area. See Beard Oil Co., 99 IBLA 40, 46 (1987).

Appellant has failed to establish that there is no reasonable probability that the producing structure underlies the subject land. At best, appellant offers a separate opinion regarding the proper interpretation of the same data regarding the geological nature of that land. That opinion is not enough to overcome BLM's determination that the subject land is situated within a KGS. B. K. Killion, *supra* at 386.

Accordingly, we conclude that BLM properly rejected appellant's noncompetitive oil and gas lease offer for land which had been determined to be within the Taylor KGS.

Pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

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Bruce R. Harris  
Administrative Judge

I concur:

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David L. Hughes  
Administrative Judge